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June 9, 2009

Via Federal Express

Document Processing Center (Mail Code 7407M)
Room 6428
Attention: 8(e) Coordinator
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
1201 Constitution Ave., NW
Washington, DC 20004

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8EHQ-0609-17542A

Dear 8(e) Coordinator:

Benzene, 1,1'Methylenebis(4-isocyanato)-CAS# 101-68-8

DCN: 88090000266

This letter is to inform you of the results of a pre-1977 (1966) acute inhalation toxicity study in rats which we recently became aware of with the test substance referenced above.

The test substance was heated above the melting point in a three-necked flask and metered pre-purified nitrogen was bubbled through the melt to carry the heated vapors into a 16-liter exposure chamber where upon cooling, the test material condensed as aerosol particles. Oxygen and dilution air when necessary were mixed with the in-put stream to maintain the chamber oxygen level at 20% (v/v). Each exposure was for 4 hours. Aerosol and particle size distribution was determined with a Cascade Impactor.

The concentrations of the test material were 0.01, 0.23, 0.26, 0.28, or 0.33 mg/L and the resulting mortalities were 0/6, 6/6, 2/6, 5/6, and 6/6, respectively. The percent respirable particles were > 90%. At lethal levels, clinical signs noted during the exposures included salivation, hyperemia, reddish discharge around the eyes, pale ears, dyspnea and death between 2:20 to 3:32 hours into the exposure. At the sublethal level, mild hyperemia was observed. Post exposure, at lethal levels, some deaths occurred from 1 hour to 2 days after the exposure.

Four rats that died during the exposures were subjected to gross pathological evaluation. Three of four showed heavy lungs, 1/4 was hyperinflated, and 2/4 showed edema and mottling of the lungs. Microscopic examination of 2 rats confirmed the presence of edema. Four rats exposed at the sublethal level were examined grossly, 2 immediately after the exposure and 2 rats after a 14 day observation period. No abnormalities were detected in these rats.

This information is submitted in accordance with current guidance issued by EPA indicating EPA's interpretation of Section 8(e) of the Toxic Substances Control Act or, where it is not clear that reporting criteria have been met, it is submitted as a precautionary measure and because it is information in which EPA may have an interest.

Sincerely,

A. Michael Kaplan, Ph.D.

Director - Regulatory Affairs

AMK: clp

(302) 366-5260

CONTAINS NO CRI